Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Acid Base Review II

* + - 1. What is the name of a neutralization reaction?
      2. What is the formula of a neutralization reaction?
      3. What two “things” must you have to start a neutralization reaction?
      4. What is the general result of a neutralization reaction? (what two products are always formed?)

5. If you have a 9.0 L of 2.0 M HCl, what concentration does 3.6 liters of Na(OH) have to have in order to exactly neutralize it?

In this problem, what is the acid? \_\_\_\_\_\_\_\_\_\_\_\_\_

In this problem, what is the base? \_\_\_\_\_\_\_\_\_\_\_\_\_

Show your work for solving this problem:

1. How much 7.3 M Ba(OH)2 is needed to exactly neutralize 1.2 liters of 3.2 M H2SO4?

In this problem, what is the acid? \_\_\_\_\_\_\_\_\_\_\_\_\_

In this problem, what is the base? \_\_\_\_\_\_\_\_\_\_\_\_\_

Show your work for solving this problem:

1. How much of a 0.01 M acid solution is needed to neutralize 9.3 liters of a 2.4 M solution of a base?

Show your work for solving this problem:

1. If you have 6.3 liters of a 5.2 M solution of Al(OH)3, what concentration does 6.1 liters of H3PO4 have to have in order to neutralize it?

In this problem, what is the acid? \_\_\_\_\_\_\_\_\_\_\_\_\_

In this problem, what is the base? \_\_\_\_\_\_\_\_\_\_\_\_\_

Show your work for solving this problem:

1. Every time you combine an acid and base will it always end up with a pH of 7? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explain your answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In the solutions unit you learned that molarity is a way to express concentration. The formula for molarity is:

Molarity = moles of solute

liters of solution

Use this information and the titration formula to answer the remaining questions on this page:

What is the concentration of a solution that has 2.3 moles of an acid in 1.5 liters of water?

Now, if 3.5 liters of the above acid are used, what concentration of 4.5 liters of a base is needed? (Use the titration formula used on the front side of the sheet)

10. Describe the processes that you used to test your products in your neutralization lab. a) what did you do to test? b) what did the test results tell you? BE SPECIFIC! \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_